

REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1, 2, 4, 5, 7-10, 12-13, 15-18 and 20-26 are presently pending in this application, Claims 1, 8, 10, 12-13 and 15-17 amended by way of the present amendment.

In the outstanding Office Action, Claims 1, 2, 4-5, 7 and 20 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 5,407,092 to Hardgrove et al.; Claims 8-9, 12, 15 and 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hardgrove et al. in view of U.S. 6,095,367 to Blair et al. and U.S. 6,517,614B1 to Klotz et al.; Claim 10, 13, 16 and 17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hardgrove et al. in view of Blair et al. and Klotz et al., and further in view of U.S. 7,093,337B1 to Taylor; Claims 21 and 22 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hardgrove et al. in view of U.S. 2004/0038094A1 to Klenk et al.; Claims 23-26 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hardgrove et al. in view of Klenk et al., and further in view of U.S. 2004/0033402A1 to Faye et al.

Turning now to the merits, in order to expedite issuance of a patent in this case, the independent claims are amended to clarify patentable features of the invention over the cited references. Specifically, amended Claim 1 recites a pressure vessel liner including a tubular trunk having end openings at opposite ends of the trunk, and a plurality of head plates joined to the trunk at the opposite ends and closing the end openings of the trunk, respectively. A reinforcing member is fixedly provided in an interior space formed by the trunk and the head plates, the reinforcing member dividing the interior space into a plurality of spaces. The reinforcing member is fixedly provided on an inner peripheral surface of the trunk, and comprises a plurality of reinforcing walls extending from the inner peripheral surface of the trunk toward a center line of the trunk and joined to one another on the center line. The head

plates are joined to the reinforcing member by friction agitation, at least one of the head plates is in the form of an outwardly bulging dome, and the reinforcing member has an end portion which projects beyond the trunk and is fitted to the form of the outwardly bulging dome of the at least one of the head plates.

Thus, amended Claim 1 specifies that the reinforcing member is fixed to an inner peripheral surface of the trunk, and includes reinforcing walls that extend from the inner peripheral surface to a center line of the trunk. An example of the structures covered by Claim 1 is shown in Fig. 1 of Applicants' specification. As seen in Fig. 1, the reinforcing member divides the interior of the trunk into spaces equal in number to the number of reinforcing walls aligned in the circumferential direction. As discussed in Applicants' specification, this structure can provide enhanced pressure resistant strength against longitudinal forces.¹ Independent Claims 8, 12 and 15 have been amended to include similar features as Claim 1.

By contrast, Hardgrove et al. does not at all describe the newly added feature of the independent claims. Hardgrove et al. describes a pipe 9 used as a reinforcing member. As seen in Fig. 1, the pipe (the reinforcing member) divides the interior of the trunk 6 into spaces inside and outside the reinforcing member. Thus, the reinforcing member of Hardgrove et al. does not disclose that the reinforcing member is fixedly provided on an inner peripheral surface of the trunk, and includes a plurality of reinforcing walls extending from the inner peripheral surface of the trunk toward the center line of the trunk and joined to one another on the center line, as recited in claim 1. The remaining secondary references to Blair et al., Klotz et al., Klenk et al. and Faye et al. are cited for features contained in the dependent claims and cannot correct the deficiencies of Hardgrove et al. noted above.

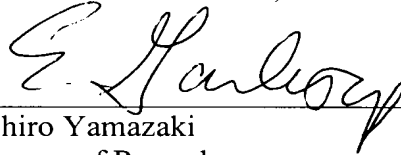
¹ See Abstract of Applicants' specification.

For the foregoing reasons, Claim 1 is believed to be allowable. Furthermore, since Claims 2, 4, 5, 7-10, 12, 13, 15-18 and 20-26 depend directly or indirectly from either Claim 1, 8, 12 or 15 substantially the same arguments set forth above also apply to these dependent claims. Hence, Claims 2, 4, 5, 7-10, 12, 13, 15-18 and 20-26 are believed to be allowable as well.

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

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